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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,729	12/24/2003	Ikuko Kobayashi	500.43372X00	9095

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EXAMINER

HENNING, MATTHEW T

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,729

Applicant(s)

KOBAYASHI ET AL.

Examiner

Matthew T. Henning

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/24/2003.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 6/23/05
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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This action is in response to the communication filed on 12/24/2003.

DETAILED ACTION

Claims 1-12 have been examined.

Title

The title of the invention is acceptable.

Priority

This application claims priority to Japan Application 2003-052231, filed on 2/28/2003.

Therefore, the effective filing date for the subject matter defined in the pending claims in this application is 2/28/2003.

Information Disclosure Statement

The information disclosure statement(s) (IDS) submitted on 11/10/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statements.

Drawings

The drawings filed on 12/24/2003 are acceptable for examination proceedings.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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1 The abstract of the disclosure is objected to because:

2 Line 1 contains the legal phraseology "comprises".

3 Lines 2, 5, and 8-9 contain the phrase "a packet" which as discussed in the interview on

4 6/22/2005 should be "packets" as the server sends and receives packets which are not identical.

5 Correction is required. See MPEP § 608.01(b).

6 *Claim Objections*

7 Claims 1-12 are objected to because of the following informalities:

8 Claim 1 recites "without via" in lines 8 and 16 which is not grammatically correct.

9 Claim 1 Line 16 recites "a second network" but no "first network".

10 As discussed in the interview on 6/22/2005, claims 11 and 12 contain similar issues to claim 1

11 and are objected to for those reasons.

12 Claims 2-10 are objected to by virtue of their dependency to claim 1.

13 Appropriate correction is required.

14
15 *Claim Rejections - 35 USC § 101*

16 Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

17 non-statutory subject matter. Claim 12 is directed towards "a program" and although the

18 program is to be executed by a stream server, the program is not claimed to be comprised on any

19 tangible object and is therefore just software. As such, claim 12 is non-statutory and is therefore

20 rejected under 35 USC 101.

21 *Claim Rejections - 35 USC § 112*

22 The following is a quotation of the second paragraph of 35 U.S.C. 112:

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1 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject
2 matter which the applicant regards as his invention.

3
4 Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for
5 failing to particularly point out and distinctly claim the subject matter which applicant regards as
6 the invention.

7 Claim 1 recites the limitation "a packet" in lines 7, 9, and 14. It is unclear whether this is
8 meant to be the same packet or different packets. As discussed in the interview on 6/22/2005,
9 the examiner will assume this to be different packets.

10 Claim 1 recites "the client apparatus" in lines 21 and 24 which is unclear whether these
11 recitations are meant to refer to "the client apparatus belonging to the particular network" or "the
12 client apparatus belonging to the network different from the particular network" or a different but
13 client apparatus. As discussed in the interview on 6/22/2005, the examiner will assume these to
14 refer to any client apparatus in communication with the stream server.

15 Claim 1 recites the limitation "the client apparatus belonging to the particular network"
16 in Lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

17 Claim 1 recites the limitation "the client apparatus belonging to a network different from
18 the particular network" in Lines 10-11. There is insufficient antecedent basis for this limitation
19 in the claim.

20 Claims 11 and 12 are rejected for the same reasons as claim 1 as discussed in the
21 interview on 6/22/2005.

22 Claims 2-10 are rejected by virtue of their dependency to claim 1.
23
24

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaid et al. (US Patent Number 6,078,953) hereinafter referred to as Vaid, in view of Vellanki et al. (US Patent Number 5,999,979) hereinafter referred to as Vellanki, and further in view of Birrell et al. (US Patent Number 6,029,164) hereinafter referred to as Birrell.

Regarding claim 1, Vaid disclosed a stream server apparatus (See Vaid Fig. 1 Element 120 and Col. 15 Lines 19-25) connected to client apparatuses (See Vaid Fig. 1 Elements 130-150 and 220) and a firewall apparatus for inhibiting a packet from illegally accessing a particular network (See Vaid Fig. 1 Element 110 and Col. 6 Lines 2-17), said stream server apparatus distributing stream data to said client apparatuses (See Vaid Col. 6 Lines 18-25) and comprising: a first interface which transmits and receives a packet to and from the client apparatus belonging to network different from the particular network via the firewall apparatus (See Vaid Col. 6 Lines 18-25 and Fig. 1 Connection between Elements 120 and 220), but Vaid failed to disclose the first interface transmitting and receiving a packet to and from the client apparatus belonging to the particular network without via the firewall apparatus. However, Vaid Fig. 1 does seem to

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1 depict that communications between the server 120 and a client 130 would not pass through the
2 firewall since the firewall is not located between them.

3 Birrell teaches that a firewall is used to provide security protection by filtering
4 communications between the Internet and the intranet (See Birrell Col. 3 Lines 54-62).

5 It would have been obvious to the ordinary person skilled in the art at the time of
6 invention to employ the teachings of Birrell in the communication system of Vaid by not
7 filtering communications between the elements in the LAN (intranet). This would have been
8 obvious because the ordinary person skilled in the art would have recognized that these
9 communications would not compromise the security of the intranet and therefore would not need
10 to be filtered.

11 Vaid further failed to disclose a second interface which transmits and receives a packet to
12 and from the client apparatus belonging to the network different from the particular network
13 without via the firewall apparatus, said second interface being connected to a second network; a
14 stream transport management module which specifies said first interface or said second interface
15 in accordance with a network attribute and a type of a communication protocol of the client
16 apparatus; and a process module which executes a communication process based on the
17 communication protocol relative to the client apparatus via the specified interface.

18 Vellanki teaches that firewalls block certain types of communications, such as UDP (See
19 Vellanki Col. 2 Lines 31-46), and that in order to stream UDP messages a proxy can be set up on
20 a separate connection than the firewall in order to bypass the security settings of the firewall (See
21 Vellanki Col. 13 Lines 4-26) and that in order to set up the connection, the user makes requests
22 via the proxy and the firewall depending on the type of communication (See Vellanki Col. 9 Line

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1 52 – Col. 10 Line 3 and Col. 13 Lines 4-26), and the server replies accordingly to the requests
2 via the proxy or firewall depending on the request (See Vellanki Col. 9 Line 52 – Col. 10 Line 3
3 and Col. 13 Lines 4-26).

4 It would have been obvious to the ordinary person skilled in the art at the time of
5 invention to employ the teachings of Vellanki in the communication system of Vaid by setting
6 up a separate connection via a proxy to the remote clients in order to communicate types of
7 packets which the firewall blocks, such as UDP packets. This would have been obvious because
8 the ordinary person skilled in the art would have been motivated to provide a means for allowing
9 UDP streams, or other communication types blocked by the firewall, to bypass the firewall.

10 Regarding claims 2-3, the combination of Vaid, Birrell and Vellanki disclosed that the
11 process module executes a stream data distribution process based on a same communication
12 protocol for both the client apparatus belonging to the particular network and the client apparatus
13 belonging to the network different from the particular network and that the protocol uses UDP
14 (See Vaid Col. 6 Lines 18-33 and Vellanki Col. 13 Lines 4-26).

15 Regarding claim 4, the combination of Vaid, Birrell and Vellanki disclosed a control
16 request reception unit which notifies an ID of the interface specified by said stream transport
17 management module to the client apparatus (See Vellanki Col. 9 Line 59 – Col. 10 Line 3 and
18 Col. 13 Lines 10-26).

19 Regarding claim 5, the combination of Vaid, Birrell and Vellanki disclosed that the
20 stream transport management module specifies said first interface, if the client apparatus belongs
21 to the network different from the particular network for which the firewall apparatus inhibits

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1 illegal accesses and if the communication protocol includes a reception process of a packet on a
2 side of the stream server apparatus (See Vellanki Col. 9 Line 52 – Col. 10 Line 3).

3 Regarding claim 6, the combination of Vaid, Birrell and Vellanki disclosed that the
4 stream transport management module specifies said second interface, if the client apparatus
5 belongs to the network different from the particular network for which the firewall apparatus
6 inhibits illegal accesses and if the communication protocol does not include a reception process
7 of a packet on a side of the stream server apparatus (See Vellanki Col. 13 Lines 4-26).

8 Regarding claim 7, the combination of Vaid, Birrell and Vellanki disclosed that the
9 stream transport management module specifies said second interface, if the client apparatus
10 belongs to the network different from the particular network for which the firewall apparatus
11 inhibits illegal accesses and if the communication protocol is a stream data distributing protocol
12 (See Vellanki Col. 13 Lines 4-26 UDP).

13 Regarding claim 8, the combination of Vaid, Birrell and Vellanki disclosed that the
14 stream transport management module specifies said first interface, if the client apparatus belongs
15 to the same network as a network to which the stream server apparatus belongs (See the rejection
16 of claim 1 above with regards to Birrell).

17 Claim 11 is rejected for the same reasons as claim 1 above and further because the server
18 was depicted as being attached to a network (See Vaid Fig. 1).

19 Claim 12 is rejected for the same reasons as claim 1 above and further because the system
20 used software to implement the functionality (See Vaid Col. 3 Lines 5-18).

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1 Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of
2 Vaid, Birrell and Vellanki as applied to claim 1 above, and further in view of Young et al. (US
3 Patent Application Publication Number 2003/0033418) hereinafter referred to as Young.

4 The combination of Vaid, Birrell and Vellanki disclosed providing an ID of the specific
5 interface (See the rejection of claim 4 above) but failed to disclose that the ID being not a local
6 ID distinguishable by the particular network for which the firewall apparatus inhibits illegal
7 accesses but a global ID capable of being translated into the local ID by a network relay
8 apparatus en route to the client apparatus requested stream data distribution.

9 Young teaches that in a proxy system for circumventing a firewall, the client should be
10 notified of the global IP address of the proxy (See Young Paragraphs 0007 and 0009).

11 It would have been obvious to the ordinary person skilled in the art at the time of
12 invention to employ the teachings of Young in the proxy system of Vaid, Birrell, and Vellanki by
13 supplying the public IP address of the proxy to the client. This would have been obvious
14 because the ordinary person skilled in the art would have been motivated to allow the client to
15 send messages to the server without the firewall blocking the messages.

16 Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination
17 of Vaid, Birrell and Vellanki as applied to claim 1 above, and further in view of Day et al. (US
18 Patent Number 5,996,025) hereinafter referred to as Day.

19 The combination of Vaid, Birrell and Vellanki disclosed a stream transport processing
20 unit for executing stream data distribution to the client apparatus based upon one stream data
21 distribution protocol (See Vellanki Col. 13 Lines 4-26) but failed to disclose a bandwidth

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1 management processing unit in the server for executing bandwidth control communication based
2 on a control program for controlling a bandwidth of the stream data distribution.

3 Day teaches that in a streaming system, in order to ensure quality of service to the
4 connected clients a bandwidth manager should be employed in the server (See Day Col. 2 Lines
5 62-66):

6 It would have been obvious to the ordinary person skilled in the art at the time of
7 invention to employ the teachings of Day in the server system of Vaid, Birrell, and Vellanki by
8 providing bandwidth management at the server. This would have been obvious because the
9 ordinary person skilled in the art would have been motivated to optimize server resource use
10 without degrading the services already in progress.

11 *Conclusion*

12 Claims 1-12 have been rejected.

13 The prior art made of record and not relied upon is considered pertinent to applicant's
14 disclosure.

15 a. Conrath (US Application Publication 2001/0037461) disclosed a system in which
16 certain communications were through a firewall and streams were through a direct
17 connection.

18 b. Hoag (US Patent Number 5,859,976) disclosed a bandwidth management system
19 for a server.


20 c. Hagen et al. (US Application Publication 2004/0133631) disclosed a system for
21 bypassing a firewall for communications blocked by the firewall.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Matthew Henning
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Art Unit 2131
6/24/2005


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